

Remarks/Arguments:

As a preliminary matter, Applicants note with appreciation the Examiner's withdrawal of the rejections under 35 U.S.C. § 112, first paragraph. Also, Applicants note with appreciation the Examiner's withdrawal of the Maeda and Wolff references as previously applied.

Rejection Under 35 U.S.C. § 112, First Paragraph

Pending claim 61 stands rejected based on 35 U.S.C. § 112, first paragraph. It is respectfully submitted that Applicants' embodiment illustrated in Figure 2A, for example, shows "segments having apices in a plane substantially perpendicular to the longitudinal axis of the stent," as recited in claim 61. Referring to Figure 2A, which shows a portion of a stent opened up to reveal its construction, the apices 22 are positioned along a circumference that lies in a plane substantially perpendicular to the longitudinal axis of the stent. See also Applicants' specification at page 9, lines 12-16.

Prior Art Rejections

Pending claims 54-61 stand rejected based on MacGregor and/or Song. Each of pending claims 54-61 is discussed below.

Claim 54

Claim 54 stands rejected as anticipated by MacGregor or Song.

Claim 54 has been amended to recite that at least two of the hoop-like tubular portions are axially arranged in juxtaposition to one another. Support for this amendment is found throughout Applicants' specification as originally filed and in Applicants' figures. Accordingly, at least two of the hoop-like tubular portions are close together or side-by-side. While tubular portions may actually touch one another, they need not be in contact and may be separated from one another. Similarly, as disclosed in U.S. Patent No. 5,800,515 to Nadal, the juxtaposed tubular portions 13, 15, 17, 19 are arranged adjacent to each other.

The amendment to claim 54 has been made specifically to overcome the MacGregor reference, which fails to disclose a stent structure in which at least two hoop-like tubular portions are axially arranged in juxtaposition to one another. Instead, the structure disclosed by MacGregor includes wire loops, each of which are actually spaced from one another. No two loops of the MacGregor reference are axially arranged close together or side-by-side. Because MacGregor fails to disclose at least two hoop-like tubular portions that are axially arranged in juxtaposition to one another, withdrawal of the rejection of claim 54 based on MacGregor is respectfully requested.

Regarding the Song reference, Song discloses a frame 10 having a plurality of unit structures 11 arranged face to face. Song at page 5, line 27 to page 6, line 1. Every unit structure is connected in tandem by a reasonable number of connecting members 31, 33, 35, 37, which are joined appropriately between bends of an appointed unit structure such that they prevent each unit structure from being separated. Song at page 6, lines 2-7.

In contrast to Song, claim 54 recites a plurality of discrete structural wires or filaments joined together to form a prosthesis, the wires or filaments each having one or more corrugated portions. Instead of each wire or filament having one or more corrugated portions as recited in

claim 54, the structure of Song includes straight connecting members 31, 33, 35, 37, that are joined between bends of the unit structure 11. Because Song fails to disclose a structure in which wires or filaments each have one or more corrugated portions, withdrawal of the Song reference is respectfully requested.

Claim 55

Claim 55 stands rejected as being anticipated by Song.

Like claim 54, claim 55 recites a plurality of discrete structural wires or filaments joined together to form a prosthesis, the wires or filaments each having one or more corrugated portions. For the reasons stated previously in connection claim 54, withdrawal of the rejection of claim 55 is respectfully requested.

Claim 56

Claim 56 stands rejected as being anticipated by Song.

Like claims 54 and 55, claim 56 recites a plurality of discrete structural wires or filaments joined together to form a prosthesis, the wires or filaments each having one or more corrugated portions. Claim 56 further recites that at least some of the straightened extension portions of at least some of the wires or filaments are oriented skew relative to the tubular axis.

Because Song fails to disclose wires or filaments each having one or more corrugated portions, the rejection of claim 56 based on Song should be withdrawn.

Additionally, Song fails to disclose at least some straightened extension portions that are oriented skew relative to the tubular axis. Even if the connecting members 31, 33, 35, 37 can be considered straightened portions, as proposed in the Office Action, Song fails to suggest that at least some of the connecting members are oriented skew relative to the tubular axis.

The Office Action cites to a passage in Song that states that the most preferable joint position of the connecting members is to be placed diagonally regarding the connecting member 31 as a fiducial point as shown in Fig. 3, in that it is preferable to have a construction 31, 33, 35, and 37 as shown in Fig. 3. Song at page 6, lines 7-12. The forgoing passage does not, however, disclose straightened extension portions oriented skew relative to the tubular axis. Instead, the connecting members of Song are each oriented along the axis of the frame 10. Whether or not an overall diagonal pattern of connecting members is shown in Fig. 4, each of Song's connecting members is oriented in a direction that is along the axis of the frame 10 as shown in Fig. 3. According, withdrawal of the rejection of claim 56 based on Song is respectfully requested.

Claim 57

Claim 57 stands rejected as anticipated by MacGregor or Song.

Like claim 54, claim 57 has been amended to recite tubular portions arranged in juxtaposition to each other in order to overcome the MacGregor reference. Also, claim 57 recites that the wires or filaments each have one or more corrugated portion, a feature not found in the Song reference.

For the forgoing reasons, withdrawal of the rejections of claim 57 based on MacGregor or Song is respectfully requested.

Claim 58

Claim 58 stands rejected as anticipated by the MacGregor reference.

Claim 58 depends from claim 54. Accordingly, for the reasons set forth previously in connection with claim 54, withdrawal of the rejection of claim 58 based on the MacGregor reference is respectfully requested.

Claim 59

Claim 59 stands rejected as anticipated by the Song reference.

Claim 59 recites that the straightened extension portion is oriented skew relative to the tube axis and extends in a substantially helical path. Claim 59 also recites that consecutive ones of the hoop-like tubular portions are also connected at a point circumferentially displaced from the extension portion.

Because Song fails to disclose a straightened extension portion oriented skew relative to the tube axis and extending in a substantially helical path (as discussed previously), withdrawal of the rejection based on Song is respectfully requested. Furthermore, Song fails to suggest that consecutive hoop-like tubular portions are also connected at a point circumferentially displaced from the extension portion. Even if, as proposed in the Office Action, the connecting members of Song can be considered to be extension portions, then there is no citation in the Office Action to any disclosure in Song that consecutive unit elements 11 of Song are also connected at a point circumferentially displaced from such connecting members. For the forgoing reasons, withdrawal of the rejection of claim 59 based on Song is respectfully requested.

Claim 60

Claim 60 stands rejected as anticipated by Song.

Claim 60 recites that each of the wires or filaments has one or more corrugated portions and further recites that the straightened portions extend in an helical path between and connect consecutive hoop-like tubular portions.

For the reasons set forth previously, withdrawal of the rejection of claim 60 based on Song is respectfully requested.

Claim 61

Claim 61 stands rejected as anticipated by Song.

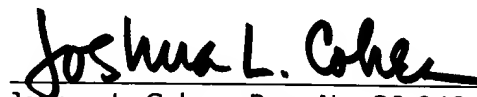
Claim 61 recites that adjacent hoops are connected by a connecting segment that extends along a helical path from a sinuous or zig-zag segment of one of the adjacent hoops to a sinuous or zig-zag segment of the other one of the adjacent hoops.

Because Song fails to disclose this feature of claim 61 (as stated previously), withdrawal of the rejection of claim 61 is respectfully requested.

Conclusion

In view of the amendments in the claims, and for the reasons stated herein, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance is respectfully requested.

Respectfully submitted,



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